

Message Text

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ACTION ARA-10

INFO OCT-01 EUR-12 IO-13 ISO-00 FEA-01 ERDA-07 AID-05
CEA-01 CIAE-00 CIEP-00 COME-00 DODE-00 EB-08 FPC-01
H-02 INR-07 INT-05 L-03 NSAE-00 NSC-05 OMB-01 PM-04
USIA-15 OES-06 SP-02 SS-15 STR-04 TRSE-00 ACDA-10
NRC-07 PA-02 PRS-01 /148 W

-----261202 060778 /14

P R 252145Z FEB 77

FM AMEMBASSY BRASILIA

TO SECSTATE WASHDC PRIORITY 0279

INFO AMEMBASSY BONN

AMEMBASSY BUENOS AIRES

USMISSION IAEA VIENNA

USMISSION EC BRUSSELS

AMCONSUL RIO DE JANEIRO

AMCONSUL SAO PAULO

UNCLAS BRASILIA 1532

E.O. 11652: N/A

TAGS: TECH ENRG PARM BR OVIP (CHRISTOPHER, WARREN)

SUBJECT: BRAZILIAN NUCLEAR CAPABILITY

REF: BRASILIA 1465

1. SUMMARY: IN RESPONSE TO FOREIGN MINISTER'S
STATEMENT (REFTEL) THAT GOB WOULD DEVELOP NUCLEAR
PROGRAM BY NATIONAL EFFORT IF COOPERATIVE PROGRAM
WITH FRG IS FRUSTRATED, VARIOUS BRAZILIAN SECTORS
COMMENTED ON CAPABILITY TO OBTAIN NUCLEAR GOALS.
END SUMMARY.

2. ACCORDING TO RECENT NEWS ARTICLES, NATIONAL
CONTENT OF FINAL (EIGHTH) REACTOR IN 1984 OF FRG-
BRAZIL SERIES MAY ONLY REACH 70 PERCENT OVERALL (76 PERCENT OF
MECHANICAL COMPONENTS, 93 PERCENT OF ELECTRICAL COMPONENTS
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AND CONTROL INSTRUMENTATION) NOT INCLUDING THE NUCLEAR
STEAM SUPPLY SYSTEM (NSSS). THIS CONFLICTS WITH
STATEMENTS MADE A MONTH AGO BY NUCLEBRAS PRESIDENT
NOGUEIRA BATISTA THAT FIFTH REACTOR IN SERIES
WILL ALREADY HAVE 100 PERCENT BRAZILIAN NSSS AND THAT
BRAZIL WILL BE ABLE TO SUPPLY REACTORS TO
FOREIGN CUSTOMERS BY MID-1980S. NUMBER OF

BRAZILIAN NUCLEAR SPECIALISTS PARTICIPATING IN R&D OR TRAINING IN FRG HAS GROWN FROM 11 IN OCT. 1974 TO OVER 200 AT THIS TIME. GOB TRAINING PROGRAM PRONUCLEAR WILL SOON SUPPLEMENT TRAINING IN FRG WITH SPECIAL SHORT COURSE PROGRAM IN BRAZIL TO DEVELOP CADRE OF NUCLEAR SCIENTISTS AND ENGINEERS. CONCERN WAS EXPRESSED FOR FUTURE OF COOPERATIVE TRAINING PROGRAM WITH FRG IN SENSITIVE TECHNOLOGIES WHICH BEGAN LONG BEFORE SIGNING OF 1975 NUCLEAR AGREEMENT IF THIS AGREEMENT WERE TO BE ABROGATED.

3. SEVERAL WELL-KNOWN SCIENTISTS (PEDRO BENTO CAMARGO OF INST FOR ATOMIC ENERGY, SAO PAULO; JOSE GOLDEMBERG OF BRAZILIAN PHYSICS SOCIETY; LUIS CINTRA DO PRADO, EX-PRESIDENT OF CNEN; MILTON VIEIRA CAMPOS OF FED. UNIV. OF MINAS GERAIS; SERGIO PORTO OF UNIV. OF CAMPINAS) COMMENT ON POSSIBILITIES AND DIFFICULTIES OF GOING IT ALONE. FOR GOLDEMBERG, WHO HAS BEEN ADVOCATING NATIONAL PROGRAM TO DEVELOP PROTOTYPE NATURAL URANIUM POWER REACTOR (\$800 MILLION OVER 10 YEARS) AS COMPLEMENT TO FRG TECHNOLOGY TRANSFER AND HAS ALWAYS OPPOSED LWR SYSTEM FOR BRAZIL, ANSWER IS TO HIRE AVAILABLE FOREIGN NUCLEAR SCIENTISTS WITH NEEDED EXPERTISE AND FORM COOPERATIVE AGREEMENTS WITH ANY COUNTRY WITH SOMETHING TO OFFER.

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4. CAMARGO BELIEVES KEY QUESTIONS ARE (1) SOURCE OF ENRICHMENT TECHNOLOGY IF LWR SYSTEM TO BE PURSUED OR (2) ABILITY TO DEVELOP NATURAL URANIUM SYSTEM WITHOUT TECHNOLOGY TRANSFER FROM ADVANCED COUNTRY. HE FAVORS CENTRIFUGE APPROACH TO ENRICHMENT BUT IS CONCERNED ABOUT NATIONAL RESOURCES OF URANIUM. (COMMENT: CAMARGO IS WELL KNOWN TO FAVOR THORIUM-BASED REACTORS SYSTEMS AND REGARDS COMMITMENT TO NUCLEAR AGREEMENT WITH FRG AS BAD DEAL FOR BRAZIL. END COMMENT.)

5. CINTRA DO BRADO ALSO FAVORS CENTRIFUGE APPROACH TO ENRICHMENT ON BASIS OF AMOUNT OF TECHNICAL INFORMATION AVAILABLE TO BRAZIL. (COMMENT: THIS WAS PATH GOB STARTED TO PURSUE NOT LONG AFTER WWII UNTIL EFFORT FAILED. END COMMENT). BUT DOES NOT SEE HOW THIS COULD SOLVE SHORT-TERM FUEL SUPPLY PROBLEM.

6. CAMPOS AND PORTO BOTH BELIEVES BRAZIL
COULD DEVELOP NATIONAL NUCLEAR PROGRAM AND
FULL FUEL CYCLE TECHNOLOGIES IN RELATIVELY
SHORT TIME SPAN (5 TO 10 YEARS).
CRIMMINS

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Decaption Note:
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Disposition Approved on Date:
Disposition Case Number: n/a
Disposition Comment:
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Disposition Event:
Disposition History: n/a
Disposition Reason:
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